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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/634,232	08/05/2003	Rodney W. Salo	279.194US2	6528	
21186 7590 01/04/2007 SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938			EXAM	EXAMINER	
			SCHAETZLE, KENNEDY		
MINNEAPOLI	MINNEAPOLIS, MN 55402		ART UNIT	PAPER NUMBER	
			3766		
SHORTENED STATUTOR	RY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
3 MONTHS 01/04/2007		PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)				
Office Action Summary		10/634,232	SALO ET AL.				
		Examiner	Art Unit				
		Kennedy Schaetzle	3766				
Period fo	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠	Responsive to communication(s) filed on 05 Oc	ctober 2006.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositio	on of Claims						
4)🖂	4) Claim(s) 1-3,7-13 and 17-24 is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
	⊠ Claim(s) <u>21-24</u> is/are allowed.						
6)⊠	Claim(s) <u>1,3,11 and 13</u> is/are rejected.						
7)🖂	Claim(s) <u>2,7-10,12 and 17-20</u> is/are objected to	<b>)</b> .					
8)□	Claim(s) are subject to restriction and/or election requirement.						
Application	on Papers						
9) The specification is objected to by the Examiner.							
10)⊠ The drawing(s) filed on <u>05 August 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority u	nder 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> <li>Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment	` '	_					
2)	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite				

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#### **DETAILED ACTION**

#### Claim Objections

1. Claims 7 and 17 are objected to because of the following informalities: reference to the *fixed* electrodes lacks antecedence. Appropriate correction is required.

#### **Double Patenting**

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-3, 7-13 and 17-24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-36 of U.S. Patent No. 6,640,135. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of the present invention, for example, is merely a broader version of claim 19 of the patent which includes the additional limitation of switching in accordance with a sensed time delay of a depolarization occurring in an area of the myocardium after a pacing pulse. Once the applicant has received a patent for a species or a more specific embodiment, he is not entitled to a patent for the generic or broader invention (see *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993)).

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## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Hafelfinger et al. (Pat. No. 5,003,975).

Regarding claim 1, Hafelfinger et al. disclose a method of operating a pacing device comprising the steps of outputting pacing pulses to a selected subset (e.g., tipto-ring, tip-to-case, ring-to-case) of a plurality of pacing electrodes (tip, ring and case) in accordance with a programmed pacing mode (e.g., unipolar or bipolar), wherein the subset of electrodes to which pulses are output is defined by a pulse output configuration (bipolar tip-to-ring, or unipolar tip-to-case and ring-to-case), and switching the pulse output configuration utilized for one or more cardiac cycles (the configuration in use prior to a loss of capture discovery) to another pulse output configuration for one or more subsequent cardiac cycles (note the text abridging cols. 8 and 9) in accordance with a switching algorithm that comprises switching the pulse output configuration at specified time intervals (once a test is initiated (note the text abridging cols. 4 and 5), the device sequentially cycles through available configurations until an appropriate electrode configuration is found).

Related comments apply to similarly worded apparatus claim 11.

## Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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7. Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hafelfinger et al. (Pat. No. 5,003,975) in view of Darvish et al. (Pat. No. 6,292,693). Hafelfinger et al. do not concern themselves with a discussion on the use of non-excitatory stimulation in conjunction with pacing. Darvish et al. disclose a well-known technique of applying non-excitatory pulses in conjunction with pacing. Such a technique enables one to effectively control the strength of contraction, thus enhancing the hemodynamic performance of the heart (see the text abridging cols. 1 and 2). Obviously enhanced cardiac performance is of immense importance in the cardiac therapy art. To include such beneficial therapy where needed would have therefore been considered a matter of obvious design by those of ordinary skill in the art.

## Allowable Subject Matter

- 8. Claims 2, 7-10, 12, 17-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 9. Claims 21-24 are allowed.

Regarding claims 21 and 23, one of the reasons for allowance is that the prior art does not discuss switching the pulse output configuration after a specified number of heart beats.

#### Conclusion

- 10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kieval discloses a related system that monitors cardiac output in conjunction with non-excitatory therapy. Kieval does not appear to explicitly state that electrode configurations are switched depending on cardiac output.
- 11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kennedy Schaetzle whose telephone number is 571 272-4954. The examiner can normally be reached on M-F from 9:30 -6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on M-F at 571 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KJS December 22, 2006

EVNEDYSCHAETZLE